

## Message Text

UNCLASSIFIED

PAGE 01 STATE 020099

ORIGIN DOE-11

INFO OCT-01 ARA-14 EUR-12 EA-12 ISO-00 SOE-02 OES-07

SS-15 ACDA-12 PM-05 NRC-07 /098 R

DRAFTED BY USDOE:IA:SCEJA:JK

APPROVED BY OES/NET: V ;OSENZO

USDOE/IA:HBENGELSDORF

USDOE/WPR:FFALCI

T/D: L. SCHEINMAN

EA/PHL: J SARTORIOUS

EUR/RPE: W SALISBURY

ARA/MEX: P STORING

ACDA: H WILLIAMS :OES/NET/EICHOYL

PM/NPP: A LOCKE

-----021455 261642Z /66

R 251905Z JAN 78

FM SECSTATE WASHDC

TO AMEMBASSY HELSINKI

AMEMBASSY MANILA

AMEMBASSY MEXICO

UNCLAS STATE 020099

E.O. 11652: N/A

TAGS: TECH, ENRGY

SUBJECT: CENTRALIZED SPENT FUEL STORAGE SYSTEM STUDY

1. THE UNITED STATES DEPARTMENT OF ENERGY HAS CONTRACTED WITH BOEING ENGINEERING AND CONSTRUCTION (BEC), A DIVISION OF THE BOEING COMPANY, AND ITS SUBCONTRACTORS, INTERNATIONAL ENERGY ASSOCIATES LIMITED (IEAL) AND ONE FIRM, DOUB, PURCELL, MUNTING AND HANSEN, TO CONDUCT A STUDY OF ISSUES AND OPTIONS IN ESTABLISHING CENTRALIZED SPENT NUCLEAR FUEL TRANSPORTATION AND STORAGE SYSTEM(S). PURPOSE IS TO

UNCLASSIFIED

UNCLASSIFIED

PAGE 02 STATE 020099

INVESTIGATE THE FEASIBILITY AND POSSIBLE INTEREST IN SUCH SYSTEM(S). THE SCOPE OF THE STUDY INCLUDES TECHNICAL, ECONOMIC, FINANCIAL, REGULATORY AND OTHER INSTITUTIONAL FACTORS. OPTIONS WILL BE DEVELOPED FOR CONSIDERATION REFLECTING DIFFERING MODES OF OPERATION, SITING, OWNERSHIP, TERMS AND CONDITIONS OF AGREEMENTS AND CONTRACTS, AND CONTROL, WITH EMPHASIS ON DEVELOPING REALISTIC OPTIONS

WHICH ARE OPERATIONALLY AND FINANCIALLY Viable AND HAVE THE BROADEST BASE OF PROSPECTIVE SUPPORT BY POTENTIAL PARTICIPANTS IN PLANNING, FINANCING, AND USING SUCH SYSTEMS.

2. FYI: IN CONDUCTING THE STUDY, VISITS HAVE BEEN MADE BY A CONTRACTOR TEAM TO A NUMBER OF COUNTRIES WITH SIGNIFICANT NUCLEAR POWER PROGRAMS FOR THE PURPOSE OF COLLECTING BOTH TECHNICAL DATA ON SPENT FUEL DISCHARGES, AND INFORMATION ON NATIONAL POLICIES AND PLANS RELATING TO THE DISPOSITION OF THIS MATERIAL. HOWEVER, CONSIDERATIONS OF CONTRACT SCHEDULING AND FUNDING MAKE IT IMPOSSIBLE FOR THE TEAM TO VISIT EACH COUNTRY WITH A NUCLEAR POWER PROGRAM. THE ADDRESSEES OF THIS MESSAGE ARE LOCATED IN SOME OF THE COUNTRIES WHICH HAVE NOT BEEN VISITED BY THE TEAM. IN LIEU OF SUCH A VISIT, ADDRESSEE EMBASSIES ARE BEING REQUESTED TO OBTAIN CERTAIN BASIC INFORMATION OF BOTH A TECHNICAL AND PLANNING NATURE ON SPENT FUEL WHICH WILL BE DISCHARGED FROM HOST COUNTRY NUCLEAR POWER PLANTS. THE INFORMATION BEING REQUESTED REPRESENTS A CONSIDERABLY SCALED-DOWN VERSION OF THAT COLLECTED IN TEAM VISITS. END FYI. IN REQUESTING THIS INFORMATION, EMBASSIES SHOULD STRESS GLOBAL NATURE OF STUDY, INDICATING THAT SIMILAR INFORMATION IS BEING OBTAINED FROM ALL OTHER COUNTRIES WITH WHICH U.S. COOPERATES IN NUCLEAR POWER. EMBASSIES SHOULD ALSO STRESS THAT THIS INFORMATION IS BEING DEVELOPED AS PART OF U.S.  
UNCLASSIFIED

UNCLASSIFIED

PAGE 03 STATE 020099

CONTRIBUTION TO INFCE, AND THAT OVERALL RESULTS WILL BE MADE AVAILABLE IN APPROPRIATE GENERAL FORM TO OTHER INFCE PARTICIPANTS. HOWEVER, STUDY IS TECHNICAL EFFORT BEING UNDERTAKEN BY DOE CONTRACTORS, AND REQUESTS FOR INFORMATION SHOULD NOT BE CONSTRUED AS PART OF GOVERNMENT TO GOVERNMENT DIALOGUE ON NUCLEAR POLICY ISSUES.

3. INFORMATION REQUESTED IS AS FOLLOWS:

----I. IDENTIFICATION OF REACTORS

-----A. LIST OF ALL POWER REACTORS EXPECTED TO BE IN COMMERCIAL OPERATION BY 1990; WITH FOLLOWING INFORMATION FOR EACH REACTOR - SIZE (MEGAWATTS ELECTRIC); TYPE (BOILING WATER, PRESSURIZED WATER, HEAVY WATER, ETC.); MANUFACTURER; DATE OF INITIAL COMMERCIAL OPERATION; CORE SIZE (NUMBER OF ASSEMBLIES AND METRIC TONS OF URANIUM).

-----B. ADDITIONAL NUCLEAR POWER TO BE INSTALLED IN PERIOD 1990-2000, WITH AS MUCH OF ABOVE INFORMATION AS POSSIBLE, BUT EXPRESSED ONLY AS TOTAL MEGAWATTS IF NECESSARY.

----II. SPENT FUEL DISCHARGES

-----FOR EACH REPEATEACH OF REACTORS LISTED IN I.A.:

-----A. SPENT FUEL DISCHARGED TO DATE.

-----B. SPENT FUEL TO BE DISCHARGED, BY YEARS, FROM 1978-1990.

-----C. ANNUAL RATE OF DISCHARGE AFTER 1990.

----III. SPENT FUEL STORAGE CAPACITY AT REACTORS (ARS)

UNCLASSIFIED

UNCLASSIFIED

PAGE 04 STATE 020099

-----FOR EACH OF REACTORS IN I.A.

-----A. CURRENT SPENT FUEL STORAGE CAPACITY (NUMBER OF FUEL ASSEMBLIES).

-----B. JANUARY 1, 1978 INVENTORY OF SPENT FUEL.

-----C. PLANS FOR EXPANSION OF STORAGE AT EACH REACTOR IN I.A.

-----  
(1) PLANNED CAPACITY (NUMBER OF FUEL ASSEMBLIES).

-----  
(2) OPERATIONAL DATE OF EXPANDED CAPACITY.

-----  
(3) IS FURTHER EXPANSION POSSIBLE?

-----  
(4) IF SO, TO WHAT SIZE?

----IV. AWAY FROM REACTOR STORAGE (AFR)

-----A. IS STORAGE OF SPENT FUEL AWAY FROM REACTORS PLANNED?

-----B. IF SO, FOLLOWING INFORMATION IS REQUESTED:

-----  
(1) PROJECTED CAPACITY, (NUMBER OF FUEL ASSEMBLIES) BY YEARS THROUGH 1995.

-----  
(2) TYPES OF FUEL TO BE STORED (BWR, LWR, HWR, ETC.)

-----  
(3) WILL FUEL FROM OTHER COUNTRIES BE STORED?

UNCLASSIFIED

UNCLASSIFIED

PAGE 05 STATE 020099

-----  
(4) IF SO, FROM WHICH COUNTRIES AND IN WHAT QUANTITIES?

----V. SPENT FUEL DISPOSITION POLICY

-----A. DOES POLICY CONTEMPLATE EXTENDED STORAGE?

-----B. IS COUNTRY INTERESTED IN PARTICIPATION IN MULTINATIONAL OR INTERNATIONAL STORAGE REGIME? ELABORATE ON RESPONSE, IF POSSIBLE.

-----C. DOES POLICY CONTEMPLATE EVENTUAL RECOVERY OF ENERGY VALUES FROM SPENT FUEL?

-----D. IF THE LATTER, WHEN AND WHERE IS RECOVERY EXPECTED TO TAKE PLACE?

4. TO BE USEFUL TO STUDY, INFORMATION REQUESTED HEREIN SHOULD BE AVAILABLE IN DEPARTMENT BY FEBRUARY 7, IF AT ALL POSSIBLE. ANY QUESTIONS SHOULD BE REFERRED PROMPTLY TO DEPARTMENT.

5. FOR MEXICO CITY. AS STATED EARLIER THE INFORMATION BEING REQUESTED REPRESENTS A CONSIDERABLY SCALED-DOWN VERSION OF THAT COLLECTED IN TEAM VISITS. IT IS LIKELY THAT A TEAM MAY VISIT MEXICO IN THE NEAR FUTURE. HOWEVER, THE ABOVE REQUESTED INFORMATION IS NEEDED FOR AN INTERIM REPORT. VANCE

UNCLASSIFIED

NNN

## Message Attributes

**Automatic Decaptoning:** X  
**Capture Date:** 01 jan 1994  
**Channel Indicators:** n/a  
**Current Classification:** UNCLASSIFIED  
**Concepts:** STORAGE, NUCLEAR FUELS  
**Control Number:** n/a  
**Copy:** SINGLE  
**Draft Date:** 25 jan 1978  
**Decaption Date:** 01 jan 1960  
**Decaption Note:**  
**Disposition Action:** n/a  
**Disposition Approved on Date:**  
**Disposition Case Number:** n/a  
**Disposition Comment:**  
**Disposition Date:** 01 jan 1960  
**Disposition Event:**  
**Disposition History:** n/a  
**Disposition Reason:**  
**Disposition Remarks:**  
**Document Number:** 1978STATE020099  
**Document Source:** CORE  
**Document Unique ID:** 00  
**Drafter:** IA:SCEJA:JK  
**Enclosure:** n/a  
**Executive Order:** N/A  
**Errors:** N/A  
**Expiration:**  
**Film Number:** D780039-0157  
**Format:** TEL  
**From:** STATE  
**Handling Restrictions:** n/a  
**Image Path:**  
**ISecure:** 1  
**Legacy Key:** link1978/newtext/t19780123/aaaaatda.tel  
**Line Count:** 204  
**Litigation Code IDs:**  
**Litigation Codes:**  
**Litigation History:**  
**Locator:** TEXT ON-LINE, ON MICROFILM  
**Message ID:** 825309e0-c288-dd11-92da-001cc4696bcc  
**Office:** ORIGIN DOE  
**Original Classification:** UNCLASSIFIED  
**Original Handling Restrictions:** n/a  
**Original Previous Classification:** n/a  
**Original Previous Handling Restrictions:** n/a  
**Page Count:** 4  
**Previous Channel Indicators:** n/a  
**Previous Classification:** n/a  
**Previous Handling Restrictions:** n/a  
**Reference:** n/a  
**Retention:** 0  
**Review Action:** RELEASED, APPROVED  
**Review Content Flags:**  
**Review Date:** 15 feb 2005  
**Review Event:**  
**Review Exemptions:** n/a  
**Review Media Identifier:**  
**Review Release Date:** n/a  
**Review Release Event:** n/a  
**Review Transfer Date:**  
**Review Withdrawn Fields:** n/a  
**SAS ID:** 3715126  
**Secure:** OPEN  
**Status:** NATIVE  
**Subject:** CENTRALIZED SPENT FUEL STORAGE SYSTEM STUDY  
**TAGS:** TECH, ENRG, FI, US, BOEING ENGINEERING & CONSTRUCTION  
**To:** HELSINKI MANILA MULTIPLE  
**Type:** TE  
**vdkgvgwkey:** odbc://SAS/SAS.dbo.SAS\_Docs/825309e0-c288-dd11-92da-001cc4696bcc  
**Review Markings:**  
Sheryl P. Walter  
Declassified/Released  
US Department of State  
EO Systematic Review  
20 Mar 2014  
**Markings:** Sheryl P. Walter Declassified/Released US Department of State EO Systematic Review 20 Mar 2014